

CUTSIS BALOGH, GREENWOOD AND GONZALES
A NEW GENUS FROM MEXICO

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CUTSIS Balogh, Greenwood, and Gonzales, Gen. Nov.
(Subtribe Spiranthinae, Orchidaceae)
Type- Neottia cinnabarina La Llave & Lexarza, in
Nov. Veg. Descr. Fasc. 2. Orch. Opusc. 3. (1825)
Neotype-Balogh and Graham 723 (US), Zacatecas, Mexico.

Herbaceous erect perennials, terrestrial. Roots thick, fleshy, fascicled. Leaves basal, clasping, ensheathing for almost $\frac{1}{2}$ length of leaf, lanceolate, sessile, glabrous, thick, mostly persistent at flowering. Inflorescence a spike in a multi-ranked spiral, densely-flowered. Scapes glandular pubescent with septate trichomes, ensheathed by bracts. Bracts leaf-like, large, tubular, overlapping, lanceolate. Flowers subtended by bracts, segments recurved or flared at apex. Floral bracts leaf-like, 3-5 nerved, sessile, ovate to lanceolate, acuminate, ciliate with glandular septate trichomes, orange-red. Calyx orange to red outer surface, yellow inside, glandular with septate pubescence; dorsal sepal narrowly lanceolate, adherent to lateral petals; lateral sepals linear-lanceolate, falcate. Corolla orange to red outer surface, yellow inner surface; lateral petals linear-lanceolate, falcate, adherent to dorsal sepal; labellum pubescent in throat, narrowly oblong-lanceolate, expanded more or less in center of labellum, adherent to clinandrium to form a tube-like entrance to the nectar sac, short claw; auricles linear adnate. Column orange-yellow, pubescent on ventral surface, extended into a short foot, slightly curved, apex rounded; lateral wings reduced, connecting clinandrium to labellum and anther cap. Stigmatic surface broad, rounded, two fused lobes, parallel to anther. Anther dorsal, erect, subequal to rostellum, lid-like, sagittate, rounded at base, narrow at apex, shrinking away from pollinarium at maturity. Rostellum elongate, narrow, tubular at apex, membranous. Viscidium plug-like, inserted for at least $\frac{1}{3}$ length into rostellum, fusiform-oblong, brown, adhesive surface on ventral face, subapical to pollinia. Pollinarium long, acicular, attached to dorsal surface of viscidium, pollinia pairs closely parallel except for a slight divergence at base, minor pollinia almost entirely enclosed by the major pollinia, pollinia narrowing towards apex, similar to

Stenorrhynchos.

Plantae herbaceae perennes terrestres. Radices crassis carnosis fasciculatis. Folia basalia amplectentia lanceolata sessilia glabra persistentia. Inflorescentiae spicatae spirales, scapi pubescentes, pilis glanduliferis septatis, vaginatis, bracteis foliiformibus amplectentibus lanceolatis imbricatis cinnabarinis. Bractee floriferae foliiformes tri-quintuplinerves sessiles ovato-lanceolatae acuminatae ciliatae cinnabarinae pilis glanduliferis septatis. Flores in segmentis recurvi; calyx extus cinnabarina intus lutea, pilis septatis saepe glanduliferis; sepalo dorsalis lineari-lanceolato acuminato ad petala lateralia adhaerenti; sepala lateralia lineari-lanceolata falcata. Corolla extus cinnabarina intus lutea glabra; petala lateralis lineari-lanceolata falcata, labello anguste oblongo-lanceolato, in medio dilatato ad clinandrium adhaerenti unguiculato, auriculis linearibus adnatis; columna cinnabarina ventraliter pubescens in pede producta, alis deminutis inter clinandrium et labellum continuis, stigmatis 2 latis rotundatis contiguus ad antheram parallelis, anthera operculato sagittato basaliter rotundato apice attenuato, rostello elongato angusto tubularis membranaceo, viscidio obturaculiformis fusiformis subapicalis, pollinario longo acicularis, pollinio parallelo ad Stenorrhynchos similis.

The name Cutsis is derived from the Indian vernacular "Cutsis." This monotypic genus is distributed in southwestern Texas, Mexico, and western Guatemala where it prefers dry habitats such as rocky slopes, limestone areas, grassy roadsides, and lava fields. Cutsis flowers during the rainy season, from July to October, and often in large colonies. The most distinguishing characteristics are the tubular tipped rostellum, plug-like viscidium, and the two-toned flowers with recurved perianth parts.

Cutsis has most often been regarded as a single species of Stenorrhynchos and was originally described as Neottia cinnabarina from "Irapaeum, S. Michael del Monte" in western Mexico. Stenorrhynchos is distinct with its bristle-like hardened rostellum, sheath-like viscidium, erect perianth parts, recurved labellum, and lanceolate anther cap. Stenorrhynchos is most likely adapted for hummingbird pollination while Cutsis may be adapted for bee pollination.

Acknowledgement: We thank Harold Robinson, Dept. of Botany, Smithsonian Institution, Washington, D.C. for the Latin Diagnosis.